

What is claimed is:

1. A digital mixer that includes a plurality of functional blocks and operates as a mixer by cooperation  
5 of the plurality of functional blocks, comprising:  
    an acquisition device that acquires versions of the functional blocks when power of the digital mixer is turned on;  
    a checking device that checks matching of the  
10 acquired versions of the functional blocks with a reference version; and  
    a controller that causes the digital mixer to continue operation thereof when the checked versions of the functional blocks all match the reference version,  
15 and causes a warning to be given to a user when at least one of the checked versions of the functional blocks mismatches the reference version.
2. A digital mixer according to claim 1, wherein a  
20 version of at least one of the plurality of functional blocks is set to a reference version for the plurality of functional blocks.
3. A digital mixer according to claim 1, further comprising:  
    a determination device operable when the at least  
25 one of the checked versions of the functional blocks mismatches the reference version, for determining whether or not the mismatch is fatal to an overall operation of the digital mixer, and  
    a controller operable when the mismatch is fatal to  
30 the overall operation of the digital mixer, for causing the digital mixer to stop operation thereof, and when the mismatch is not fatal to the overall operation of the digital mixer, for issuing a notification that the operation of the digital mixer will be continued by  
35 ignoring the mismatch, and causing the digital mixer to

continue operation thereof by disconnecting a functional block determined to mismatch, from the plurality of functional blocks.

4. A digital mixer according to claim 1, further comprising:

5 a version acquisition and checking device operable when at least one new functional block is connected to the plurality of functional blocks, for acquiring a version of the at least one new functional block  
10 connected to the plurality of functional blocks, and checking matching of the acquired version with the reference version,

a determination device operable when there is a mismatch between the checked version and the reference  
15 version, for determining whether or not the mismatch is fatal to an overall operation of the digital mixer, and

a controller operable when the mismatch is fatal to the overall operation of the digital mixer, for causing the digital mixer to stop operation thereof, and when the  
20 mismatch is not fatal to the overall operation of the digital mixer, for issuing a notification that the operation of the digital mixer will be continued by ignoring the mismatch, and causing the digital mixer to continue operation thereof by disconnecting a functional  
25 block determined to mismatch, from the plurality of functional blocks.

5. A digital mixer according to claim 1, further comprising:

an abnormality detecting device that detects  
30 abnormality of the plurality of functional blocks,

a determination device operable when abnormality is detected in at least one of the plurality of functional blocks, for determining whether or not the abnormality is fatal to an overall operation of the digital mixer, and

35 a controller operable when the abnormality is fatal

to the overall operation of the digital mixer, for causing the digital mixer to stop operation thereof, and when the abnormality is not fatal to the overall operation of the digital mixer, for issuing a

5 notification that the operation of the digital mixer will be continued by ignoring the abnormality, and causing the digital mixer to continue operation thereof by disconnecting the functional block determined to be abnormal, from the plurality of functional blocks.

10 6. A digital mixer according to claim 1, further comprising a display that displays results of checking by said checking device.

7. A digital mixer according to claim 1, wherein said checking device checks matching of the acquired  
15 versions of the functional blocks in at least one of a case where the power of the digital mixer has is turned on, a case where an instruction is input for checking a matching state of a version of at least one of the plurality of functional blocks, a case where at least one  
20 new functional block is connected to the plurality of functional blocks, and a case where at least one functional block is disconnected from the plurality of functional blocks.

8. A digital mixer according to claim 6, wherein  
25 one specific functional block among the plurality of functional blocks includes a plurality of sub functional blocks having respective versions, a version of a specific sub functional block of the plurality of sub functional blocks being set to the reference version, and  
30 said checking device checks matching of a version of the specific functional block exclusive of the specific sub functional block with the reference version, said display displaying results of the checking, the version of the specific functional block, and the reference version.

35 9. A digital mixer according to claim 8, wherein

said checking device checks matching of the respective versions of the sub functional blocks other than the specific sub functional block with the reference version, and said display displays the versions of the sub functional blocks other than the specific sub functional block and respective results of the checking thereof.

10. A digital mixer according to claim 8, wherein functional blocks other than the specific functional block include a plurality of sub functional blocks having respective versions, and said checking device checks matching of respective versions of the functional blocks other than the specific functional block with the reference version, said display displaying the versions of the functional blocks other than the specific functional block and respective results of the checking thereof.

11. A digital mixer according to claim 10, wherein said checking device checks matching of the versions of the plurality of sub functional blocks included in the functional blocks other than the specific functional block with the reference version, and said display displays the respective versions of the sub functional blocks included in the functional blocks other than the specific functional block and respective results of the checking thereof.

12. A digital mixer according to claim 8, wherein said display displays a plurality of sub functional blocks connected to at least one input and at least one output of at least one functional block other than the specific functional block.

13. A digital mixer according to claim 12, wherein said checking device checks matching of respective versions of the sub functional blocks connected to the at least one input and the at least one output of the at least one functional block other than the specific

functional block with the reference version, and said display displays the versions of the sub functional blocks connected to the at least one input and the at least one output of the at least one functional block other than the specific functional block, and results of the checking thereof.

14. A digital mixer according to claim 12, wherein the at least one input and the at least one output of the at least one functional block other than the specific functional block have a plurality of terminals, and said display displays respective connection states of the terminals.

15. A digital mixer that includes a plurality of functional blocks and operates as a mixer by cooperation of the plurality of functional blocks, wherein the functional blocks have CPU's and storage devices that store respective control programs executed by said CPU's, the digital mixer comprising:

an acquisition device that acquires versions of the control programs of the functional blocks when power of the digital mixer is turned on;

a checking device that checks matching of the acquired versions of the control programs with a reference version; and

a controller that causes the digital mixer to continue operation thereof when the checked versions of the control programs all match the reference version, and causes a warning to be given to a user when at least one of the checked versions of the control programs mismatches the reference version.

16. A digital mixer according to claim 15, wherein a version of at least one of the control programs is set to a reference version for the control programs of the plurality of functional blocks.

17. A method of controlling a digital mixer that

includes a plurality of functional blocks and operates as a mixer by cooperation of the plurality of functional blocks, wherein the functional blocks have respective versions,

5       the method comprising:

an acquisition step of acquiring the versions of the functional blocks when power of the digital mixer is turned on;

10       a checking step of checking matching of the acquired versions of the functional blocks with a reference version; and

15       a control step of causing the digital mixer to continue operation thereof when the checked versions of the functional blocks all match the reference version, and causing a warning to be given to a user when at least one of the checked versions of the functional blocks mismatches the reference version.

18. A method of controlling a digital mixer, according to claim 17, wherein a version of at least one of the plurality of functional blocks is set to a reference version for the plurality of functional blocks.

19. A method of controlling a digital mixer that includes a plurality of functional blocks and operates as a mixer by cooperation of the plurality of functional blocks, wherein the functional blocks have respective versions, and a version of at least one of the functional blocks is set to a reference version for the plurality of functional blocks,

25       the method comprising:

30       an acquisition step of acquiring the versions of the functional blocks when power of the digital mixer is turned on;

35       a detecting step of detecting whether or not at least one new functional block is connected to the plurality of functional blocks;

a checking step of checking matching of the acquired versions of the functional blocks and a version of the at least one functional block connection of which has been detected, with the reference version;

5       a determination step of determining, when at least one of the checked versions of the functional blocks mismatches the reference version, whether or not the mismatch is fatal to an overall operation of the digital mixer; and

10       a control step of (1) causing the digital mixer to transit to a normally operative state when the checked versions of the functional blocks all match the reference version, or (2) issuing an instruction for stopping operation of the functional blocks, displaying results of  
15 the checking in said checking step, the respective versions of the functional blocks, and a message that the mismatch is fatal to the overall operation of the digital mixer, and causing the digital mixer to transit to an inoperative state, when the mismatch is fatal to the  
20 overall operation of the digital mixer, or (3) issuing an instruction for stopping operation of a functional block that mismatches in version, and cutting off communication with the functional block, displaying results of the checking in said checking step, the versions of the  
25 functional blocks, and a message that operation will be continued by ignoring the mistake, and causing the digital mixer to transit to a partially operative state, when the mismatch is not fatal to the overall operation of the digital mixer.

30       20. A method of controlling a digital mixer that includes a plurality of functional blocks and operates as a mixer by cooperation of the plurality of functional blocks, wherein the functional blocks have respective versions, and a version of at least one of the functional  
35 blocks is set to a reference version for the plurality of

functional blocks,

the method comprising:

an acquisition step of acquiring the versions of the functional blocks when power of the digital mixer is  
5 turned on;

a version acquisition completion-determining step of determining whether or not acquisition of the versions of all the functional blocks has been completed;

a timeout-determining step of determining whether or  
10 not a predetermined time period has elapsed after version acquisition was started in said acquisition step;

an impossible version acquisition-determining step of determining, when it is determined in said timeout-determining step that the predetermined time period has  
15 elapsed, that a version of a functional block which could not be acquired in said acquisition step is unobtainable; and

a checking step of checking matching of the versions of the functional blocks acquired in said acquisition  
20 step with the reference version, when it is determined in said version acquisition completion-determining step that acquisition of the versions of all has been completed, or when it is determined in said timeout-determining step that the predetermined time period has elapsed.

21. A method of controlling a digital mixer that  
25 includes a plurality of functional blocks and operates as a mixer by cooperation of the plurality of functional blocks, wherein the functional blocks have respective versions, and a version of at least one of the functional  
30 blocks is set to a reference version for the plurality of functional blocks,

the method comprising:

an acquisition step of acquiring, when at least one new functional block is connected to the plurality of  
35 functional blocks, a version of the at least one



functional block connected to the plurality of functional blocks;

5 a checking step of checking matching of the acquired version of the at least one functional block connected to the plurality of functional blocks with the reference version;

an operation stop-instructing step of issuing, when the checked version of the at least one functional block mismatches the reference version, an instruction for  
10 stopping operation of the at least one functional block connected to the plurality of functional blocks; and

a display step of displaying the version of the at least one functional block connected to the plurality of functional blocks and results of the checking in said  
15 checking step.

22. A method of controlling a digital mixer, according to claim 21, comprising a communication cutoff-instructing step of issuing, when the checked version of the at least one functional block connected to the  
20 plurality of functional blocks mismatches the reference version, an instruction for cutting off communication with the at least one functional block connected to the plurality of functional blocks.

23. A method of controlling a digital mixer that  
25 includes a plurality of functional blocks and operates as a mixer by cooperation of the plurality of functional blocks, wherein the functional blocks have respective versions, and a version of at least one of the functional blocks is set to a reference version for the plurality of  
30 functional blocks, and wherein the digital mixer checks matching of the versions of the plurality of functional blocks with the reference version, and displays results of the checking in a dialog box,

the method comprising:

35 a notification step of notifying, when disconnection

of at least one functional block from the plurality of functional blocks is detected, a user that the at least one functional block has been disconnected from the plurality of functional blocks;

5       a first update step of updating a status of the digital mixer according to a kind of the disconnected functional blocks;

          a determination step of determining, when disconnection of at least one functional block from the  
10       plurality of functional blocks is detected, whether or not the dialog box is being displayed, or whether or not there is a version mismatch of at least one functional block of the plurality of function blocks;

          a second update step of updating, when it is  
15       determined in said determination step that the dialog box is being displayed or that there is a version mismatch, display concerning the disconnected functional block in the dialog box; and

          a control step of causing the digital mixer to  
20       transit to a normally operative state when there is no version mismatch after the update of the display concerning the disconnected functional block in the dialog box, or causing the digital mixer to transit to a partially operative state when there is a version  
25       mismatch of at least one functional block of the plurality of function blocks but operation of the digital mixer is possible, or causing the digital mixer to transit to an inoperative state when there is a version mismatch that is fatal to continued overall operation of  
30       the digital mixer.